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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,120	03/16/2005	Akihiko Nishio	L9289.05105	8910

24257 7590 01/11/2008

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EXAMINER	
YOUNG, JANELLE N	

ART UNIT	PAPER NUMBER
2618	

MAIL DATE	DELIVERY MODE
01/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/528,120	NISHIO ET AL.	
	Examiner	Art Unit	
	Janelle N. Young	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Pages 2-6, filed October 22, 2007, with respect to Claim 1 have been fully considered and are persuasive. The Rejection of Claim 1 has been withdrawn.

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-6 & 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwak et al. (US Patent 2004/0014482) as applied to claim 6 above, and further in view of Takano et al. (US Patent 2002/0187786).

As for claims 2-3, Kwak et al. teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated

channels (Fig. 3) assigned individually to a plurality of mobile stations (Fig. 3; Abstract; and Para. 0064), comprising the steps:

each of said number of mobile stations, each transmitting first TPC command for the downlink common channel and a second TPC command for the downlink dedicated channel to a base station, through an uplink dedicated channel (Abstract and Para. 0026-0027 of Kwak et al.).

What Kwak et al. does not explicitly teach is transmission intervals in a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal.

However Takano et al. teaches a method for controlling transmit power, base station controlling transmit power of the downlink common channel, based on said first TPC commands and controlling transmit powers of the downlink dedicated channels, based on said second TPC commands (Co l. 11, line 65-Col. 12, line 13; Col. 13, line 29-Col. 14, line 22; and Col. 15, lines 9-28 of Takano et al.), wherein: for each mobile station a transmission interval of the transmission power control; which reads on claimed first TPC command, longer than a transmission interval of the additional transmission power control; which reads on claimed second TPC command, (Fig. 6, 8-9, 13, 16, 21, & 24; Col. 3, lines 19-25; Col. 6, lines 44-50; Col. 7, lines 3-23; Col. 15, lines 54-63; and Col. 18, lines 19-35 of Takano et al.) and wherein, one frame, the number of times the transmission power control; which reads on claimed first TPC command, transmitted smaller than the number of times the additional transmission

power control; which reads on claimed second TPC command, is transmitted (Fig. 6, 8-9, 13, 16, 21, & 24; Col. 6, lines 31-37; Col. 7, lines 3-23; Col. 9, lines 46-59; Col. 10, lines 31-40; Col. 15, lines 54-63; and Col. 18, lines 19-35 of Takano et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a transmission interval of the transmission power control intervals and number of times the additional transmission power control, is transmitted, as taught by Takano et al., in a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations (Para. 0030 of Kwak et al.). In addition Kwak et al. discloses a base station (Fig. 1-3:**SB**) controlling transmit power of the input signal; which reads on claimed downlink common channel, based on said first TPC commands (Fig. 1-3:**TCP_1**) and controlling transmit powers of the input signal; which reads on claimed downlink dedicated channels, based on said second TPC commands (Fig. 1-3:**TCP_2**) (Para. 0001, 0003, 0004, & 0007 of Kwak et al.).

The motivation of this combination would be the effect of the downlink transmission power control that can follow a variation in the propagation loss and control the frame error rate due to the timing intervals in a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations (Col. Col 5, line 63-Col. 6, line 5; Col. 6, lines 32-36 & 44-50; Col. 9, lines 45-59; and Col. 10, lines 31-41 of Takano et al.).

wherein both said first TPC command (Fig. 1-3:**TCP_1** of Kwak et al.) and said second TPC command (Fig. 1-3:**TCP_2** of Kwak et al.) are transmitted in a same time slot for each mobile station (Para. 0002 of Kwak et al.).

As for claim 5, Kwak et al. teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:e_2) assigned individually a number; which reads on claimed plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Kwak et al.), comprising the steps:

each of said number of mobile stations (Fig. 1:**SM_1**, **SM_1**, ... **SM_N** of Kwak et al.), each transmitting first TPC command (Fig. 1-3:**TCP_1** of Kwak et al.) for the input signal; which reads on claimed downlink common channel (Fig. 1-3:e_1 of Kwak et al.), and a second TPC command (Fig. 1-3:**TCP_2** and Para. 0002) for the input signal; which reads on claimed downlink dedicated channel (Fig. 1-3:e_2) to a base station (Fig. 1-3:**SB**), through an output signal; which reads on claimed uplink dedicated channel (Abstract and Para. 0004 & 0035 of Kwak et al.) and;

said base station (Fig. 1-3:**SB**) controlling transmit power of the input signal; which reads on claimed downlink common channel, based on said first TPC commands (Fig. 1-3:**TCP_1**) and controlling transmit powers of the input signal; which reads on claimed downlink dedicated channels, based on said

As for claim 4, Kwak et al. teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_2}$ of Kwak et al.) assigned individually a number; which reads on claimed plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004), comprising the steps:

each of said number of mobile stations (Fig. 1:$\mathbf{SM_1}$, $\mathbf{SM_1}$, ... $\mathbf{SM_N}$ of Kwak et al.), each transmitting first TPC command (Fig. 1-3:$\mathbf{TCP_1}$ of Kwak et al.) for the input signal; which reads on claimed downlink common channel (Fig. 1-3:$\mathbf{e_1}$ of Kwak et al.), and a second TPC command (Fig. 1-3:$\mathbf{TCP_2}$ and Para. 0002 of Kwak et al.) for the input signal; which reads on claimed downlink dedicated channel (Fig. 1-3:$\mathbf{e_2}$ of Kwak et al.) to a base station (Fig. 1-3:**SB** of Kwak et al.), through an output signal; which reads on claimed uplink dedicated channel (Abstract and Para. 0004 & 0035 of Kwak et al.) and;

said base station (Fig. 1-3:**SB** of Kwak et al.) controlling transmit power of the input signal; which reads on claimed downlink common channel, based on said first TPC commands (Fig. 1-3:$\mathbf{TCP_1}$ of Kwak et al.) and controlling transmit powers of the input signal; which reads on claimed downlink dedicated channels, based on said second TPC commands (Fig. 1-3:$\mathbf{TCP_2}$) (Para. 0001, 0003, 0004, & 0007 of Kwak et al.):

second TPC commands (Fig. 1-3:**TCP_2**) (Para. 0001, 0003, 0004, & 0007 of Kwak et al.) wherein:

said base station increases a transmit power of the input signal; which reads on claimed downlink common channel, when at least one of the first commands transmitted from said plurality of mobile stations is a TPC command (Fig. 1-3:**TCP_1**) instructing an increase of the transmit power and decreases the transmit power of the input signal; which reads on claimed downlink common channel, when all of said first TPC commands transmitted from said plurality of mobile stations are TPC commands instructing a decrease of the transmit power (Abstract, Para. 0004, and 0007 of Kwak et al.). Kwak et al. teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:**e_2** of Kwak et al.) assigned individually a number; which reads on claimed plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Kwak et al.). A number of mobile stations (Fig. 1:**SM_1**, **SM_1**, ... **SM_N** of Kwak et al.), each transmitting first TPC command (Fig. 1-3:**TCP_1** of Kwak et al.) for the input signal; which reads on claimed downlink common channel (Fig. 1-3:**e_1** of Kwak et al.), and a second TPC command (Fig. 1-3:**TCP_2** and Para. 0002 of Kwak et al.) for the input signal; which

reads on claimed downlink dedicated channel (Fig. 1-3:$\mathbf{e_2}$ of Kwak et al.) to a base station (Fig. 1-3:**SB** of Kwak et al.), through an output signal; which reads on claimed uplink dedicated channel (Abstract and Para. 0004 & 0035 of Kwak et al.).

As for claim 6, Kwak et al. teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_2}$ of Kwak et al.) assigned individually a number; which reads on claimed plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Kwak et al.), comprising the steps:

each of said plurality of mobile stations each transmitting a TPC command (Fig. 1-3:$\mathbf{TCP_N}$) for the input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_N}$) a base station through an output signal; which reads on claimed uplink dedicated channel (Abstract and Para. 0004 & 0035); and

said base station controlling transmit powers of the input signal; which reads on claimed downlink dedicated channels, based on said TPC command (Fig. 1-3:$\mathbf{TCP_N}$) and controlling transmit powers of the downlink common channel at a transmit power equal to a maximum transmit power in a plurality of transmission powers of the downlink dedicated channels after transmit power control said maximum transmit power with an addition of an offset (Para. 0005, 0012, and 0014-0015 of Kwak et al.).

a reception section (Fig. 1-3:**13**) that receives a first TPC command (Fig. 1-3:**TCP_1**) for the input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:**e_1**), and a second TPC command (Fig. 1-3:**14_2**) the downlink dedicated channel (Fig. 1-3:**e_2**) through output signal; which reads on claimed uplink dedicated channel; from each of the said plurality of mobile station;

a first power control units; which reads on claimed control section that controls a transmit power (Fig. 1-3:**14_1**), of the downlink common channel based on said first TPC commands (Fig. 1-3:**TCP_1**) and a second power control units; which reads on claimed control section that controls a transmit power (Fig. 1-3:**14_2**), of the downlink dedicated channels based on said second TPC commands (Fig. 1-3:**TCP_2**) (Abstract and Para. 0004 & 0035 of Kwak et al.).

Regarding claim 10, see explanation as set forth regarding claims 6 (method claim) because the claimed base station apparatus carrying out a transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:**e_2**) assigned individually a number; which reads on claimed plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Kwak et al.), would perform the method steps.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwak et al. (US Patent 2004/0014482) as applied to claim 6 above, and further in view of Kumar et al. (US Patent 6434367).

As for claim 7, Kwak et al. teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_2}$ of Kwak et al.) assigned individually a number; which reads on claimed each of said plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Kwak et al.). A number of mobile stations (Fig. 1:$\mathbf{SM_1}$, $\mathbf{SM_1}$, ... $\mathbf{SM_N}$ of Kwak et al.), each transmitting first TPC command (Fig. 1-3:$\mathbf{TCP_1}$ of Kwak et al.) for the input signal; which reads on claimed downlink common channel (Fig. 1-3:$\mathbf{e_1}$ of Kwak et al.), and a second TPC command (Fig. 1-3:$\mathbf{TCP_2}$ and Para. 0002 of Kwak et al.) for the input signal; which reads on claimed downlink dedicated channel (Fig. 1-3:$\mathbf{e_2}$ of Kwak et al.) to a base station (Fig. 1-3:**SB** of Kwak et al.), through an output signal; which reads on claimed uplink dedicated channel (Abstract and Para. 0004 & 0035 of Kwak et al.).

What Kwak et al. does not explicitly teach is Negative Acknowledge (NAK) and/or Acknowledge (ACK) in a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal.

As for claim 8, Kwak et al. teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_2}$) assigned individually a number; which reads on claimed plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Kwak et al.), comprising the steps:

each of said plurality of mobile stations each transmitting a TPC command (Fig. 1-3:$\mathbf{TCP_N}$) for the input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_N}$) and a signal indicating an amount of increase of a transmit power of the downlink common channel base station through an output signal; which reads on claimed uplink dedicated channel (Abstract, Para. 0004, and 0007 of Kwak et al.); and

said base station controlling transmit powers of the downlink dedicated channels based on said TPC commands and increasing a transmit power of the downlink common channel by said amount of increase of the transmit power.

As for claims 9 & 11, Kwak et al. teaches a base station (Fig. 1-3:**SB**) apparatus carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to plurality of mobile stations concurrently with a transmit power control over downlink dedicated channels assigned individually to said plurality of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Kwak et al.), comprising:

However Kumar et al. teaches a method for controlling transmit power, wherein said plurality of mobile stations each transmit an ACK signal NACK signal the downlink common channel to said base station through the uplink dedicated channel an uplink random access channel, and said base station decreases said offset when the ACK signal is received a plurality of times consecutively and increases said offset when the NACK signal is received plurality of times consecutively (Abstract; Col. 1, line 33-37; Col. 6, lines 1-25; and Col. 11, line 57-Col. 12, line 3 in correspondence with Col. 7, lines 33-53; Col. 11, lines 35-48; Col. 16, lines 3-13, 26-44, & 60-66; and Col. 17, lines 9-16 of Kumar et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a Negative Acknowledge (NAK) and/or Acknowledge (ACK), as taught by Kumar et al., in a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Kwak et al.).

The motivation of this combination would be the effect of the transmission control portion acquires the information, the transmission control portion, under the control of the main control portion, instructs through the transmission-related control line the transmitted data processing portion to transmit an ACK (Acknowledgement) signal to the base station. The transmitted data processing portion multiplexes the transmission ACK signal together with the transmitted data (Abstract; Col. 1, line 33-37; Col. 2, lines 18-56; Col. 6, lines 1-25; Col. 10, lines 5-15; and Col. 11, line 57-Col. 12, line 3 in

correspondence with Col. 10, lines 50-63; Col. 13, line 55-Col. 14, line 31; Col. 15, lines 20-53; and Col. 17, lines 9-16 of Kumar et al.).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle N. Young whose telephone number is (571) 272-2836. The examiner can normally be reached on Monday through Friday: 8:30 am through 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JNY
May 13, 2007

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